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Dr Chapman No 86

University of Pennsylvania

An
Inaugural Essay

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1829

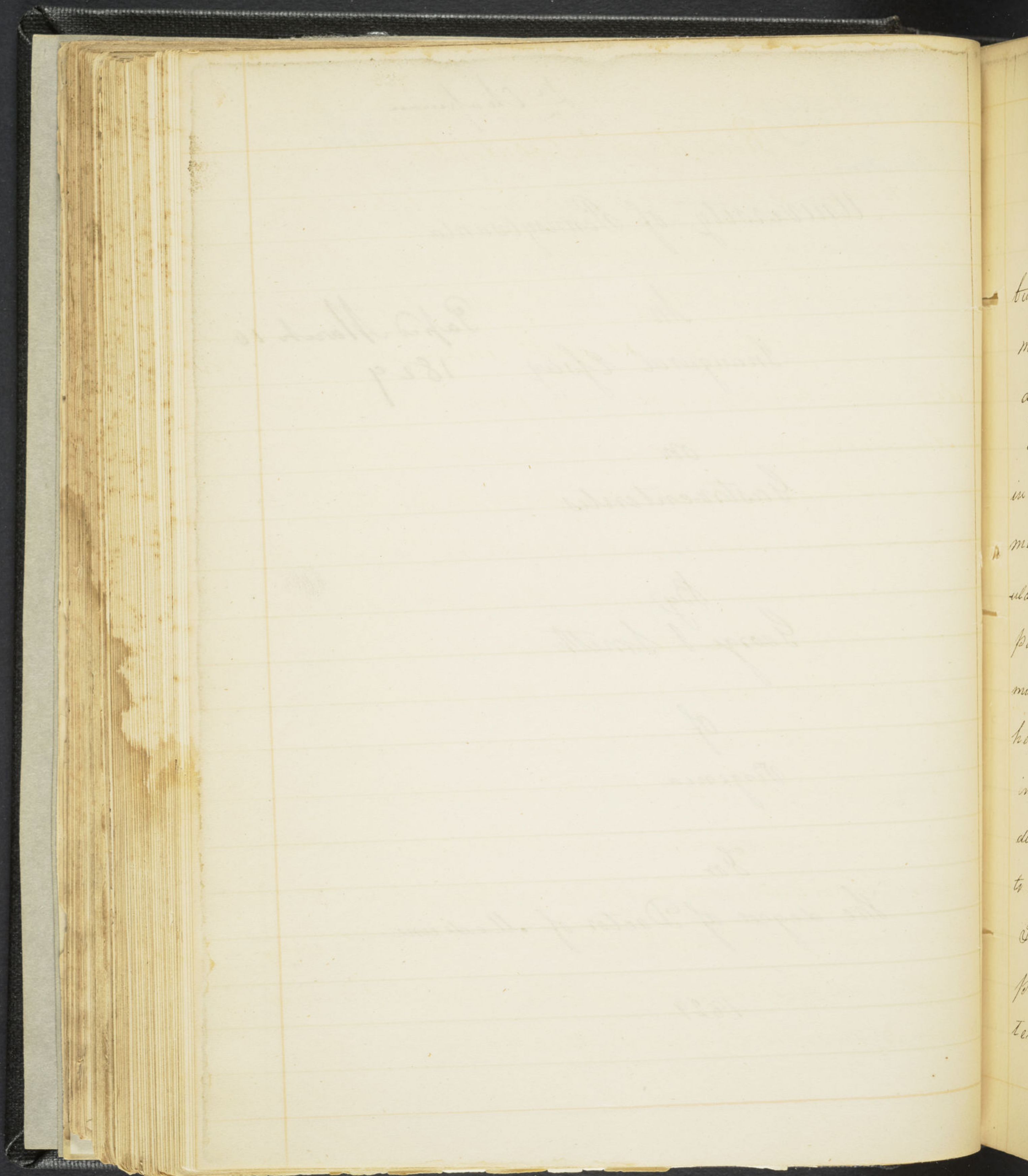
on
Gastro-enteritis

By
George J. Smith

of
Virginia

For
The degree of Doctor of Medicine

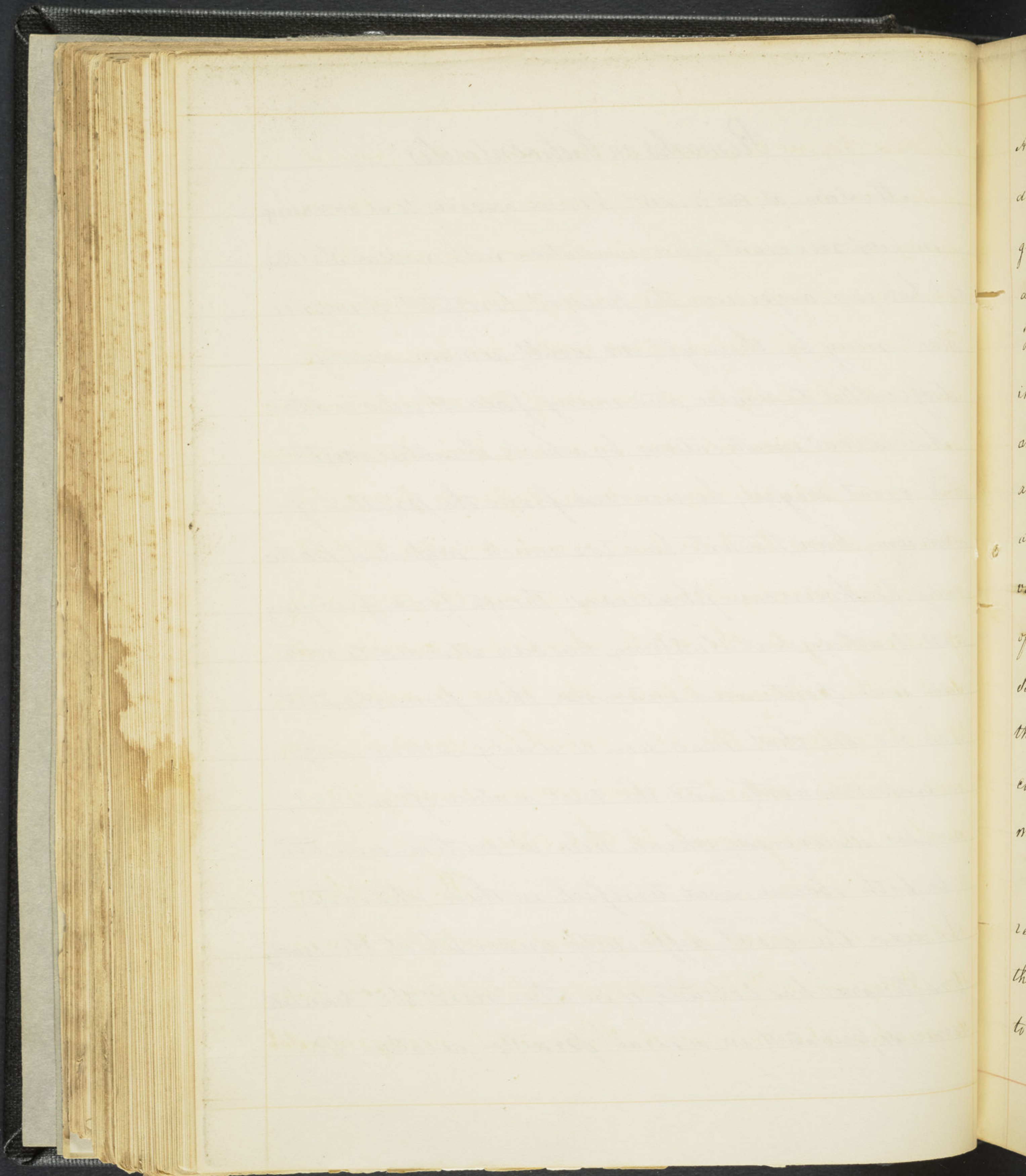
1829



Remarks on Gastroenteritis

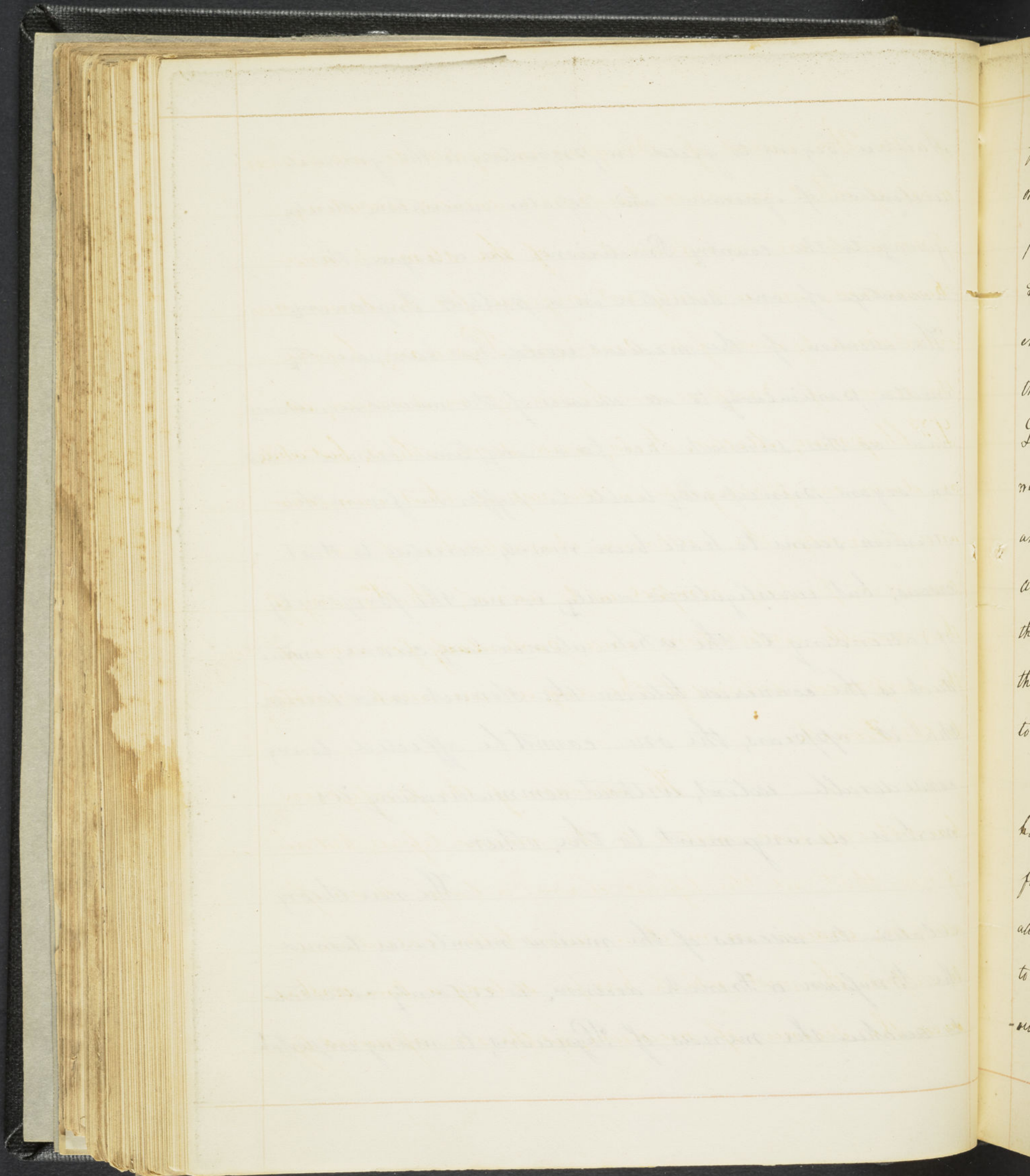
Medicine at the present period appears to be advancing in improvement and innovation with rapid strides but however auspicious the present prospect of improvement may be, there yet no doubt, remain, many difficulties to remove and many false theories to detect. Autopsical investigations, by which obscurities might, in a great degree, be removed from the practice of medicine, have hitherto been too much neglected particularly by American physicians; though for a few years past, pathological anatomy has been attended to with much more spirit and enterprise than formerly, and hence we see, that medicine is daily advancing in improvement, and the true nature of many diseases discovered, which were at one time considered to be both obscure and terrific in their character.

Indeed, the great difficulty under which the country practitioner has laboured, or in other words, that panick terror, so prevalent in a rural practice relative to—



Autopsies begin to yield in proportion to the gradual
declension of ignorance and popular superstition, thereby
giving to the country Practitioner, in a degree, the
advantage of one situated in a public Infirmary.
The attention of the medical world has been recently
invited, particularly to all diseases of the mucous membranes;
and as the stomach has for a long time been considered
an organ principally liable to suffer in fevers, the
attention seems to have been mainly directed to that
viscus; but investigations daily evince the propriety
of attending to the whole alimentary canal; indeed
such is the connexion between the stomach and bowels,
that it appears, the one cannot be affected to any
considerable extent, without communicating its
morbid derangement to the other.

The new theory
relative to diseases of the mucous membranes, termed
the Brissain or French doctrine, is certainly calculated
to awaken the minds of Physicians, to many important

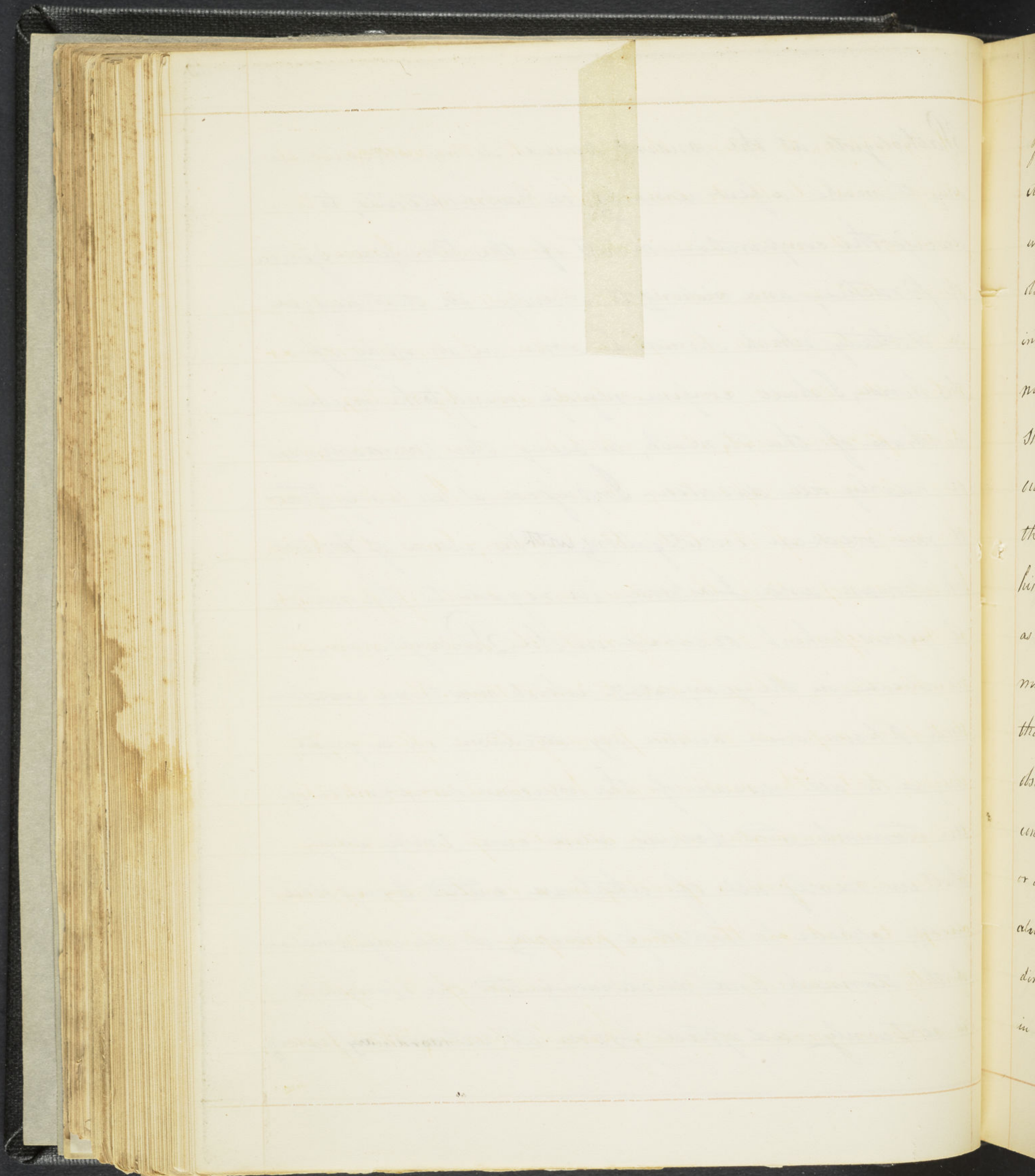


facts. The ideas of Broussais in regard to all diseases or all of what are termed Idiopathic diseases, consisting primarily in an inflammation of the stomach and Duodenum, are certainly not original, for the same were entertained by some few American Physicians, before the name of Broussais was heard of in America, as Drs Chapman, Miller, Seete, and some others; but while we claim our prerogative in this respect, that candour and liberality, the wellknown characteristic of an American people, compel us to admit, that ^{as} many of their valuable contributions, and particularly for some of the improved doctrines of the day, we are much indebted to the French.

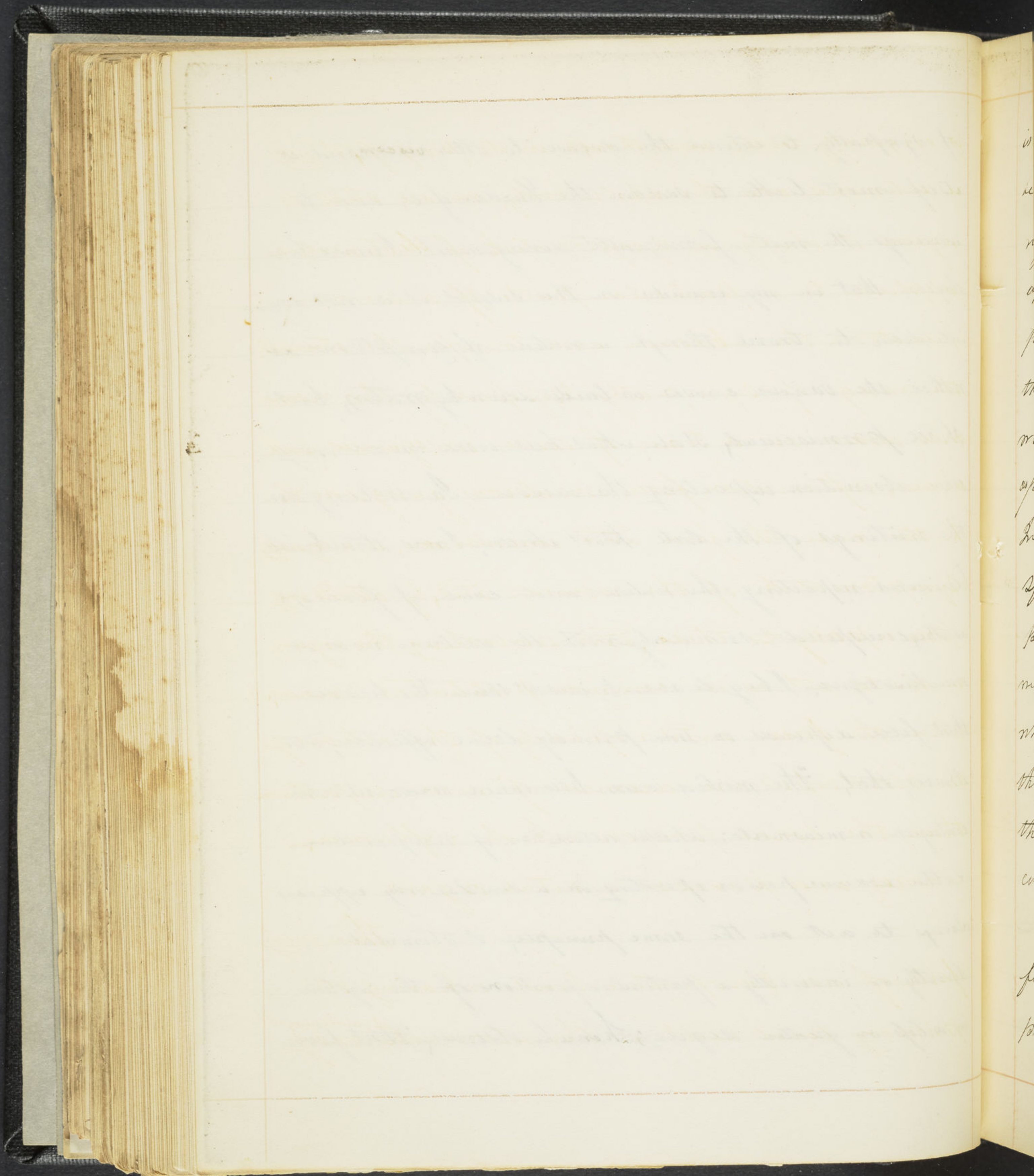
The attention of the profession has not only been invited to the mucous tissues, but we find that all the tissues claim a large share of attention; indeed no method seems better calculated to dispel the mist which has for so long a time overshadowed the science of medicine, as the one assumed by



Pathologists at the present period. As my intention is
 only to make a few remarks on Gastro-enteritis, to
 discuss the comparative merits of the Broussaisian system
 of practice, and risking to indulge in that degree
 of prolixity, which should be done in an essay of
 this kind, I shall confine myself merely to the mucous
 membrane of the stomach, as being the primary seat
 of nearly all diseases. Impressed at an early period
 of my medical investigations, with the ideas of Doctors
 Chapman and Jackson, in regard to the nature
 of fevers, which occurred in the Pennsylvania
 Almshouse in the years 1826-7- which was to me, indeed
 novel, I have since devoted my attention in a great
 degree to all diseases of the mucous membranes of
 the stomach and bowels, and can truly say,
 that in nearly all of what are called Idiopathic
 fevers, appear to consist primarily in an inflammation
 of the stomach and duodenum, and the stomach
 is certainly adapted from its extraordinary power



of sympathy, to extend the disease to other viscera, and is itself most liable to sustain the burden of it, and to undergo the most formidable derangement. I need here observe, that in my remarks on this subject it is not my intention to trace through a routine of symptoms as notice the various causes as laid down by writers, but shall promiscuously state what has come under my own observation respecting the disease. In looking over the writings of the late Robt. Mead, I was struck with his ideas respecting the nature and cause of fevers, & as they correspond so nearly with the doctrine now so much in vogue, I beg leave to insert them. He believes that fever depends on some primary local affection, and observes, that, "the morbid cause how varied soever, whether contagion or miasmata; whether attenuation of temperature or other noxious power operating in a similar way, appears always to act on the same principle; it stimulates directly or indirectly a particular portion of the system in a less or greater degree; hence he observes, "that fever

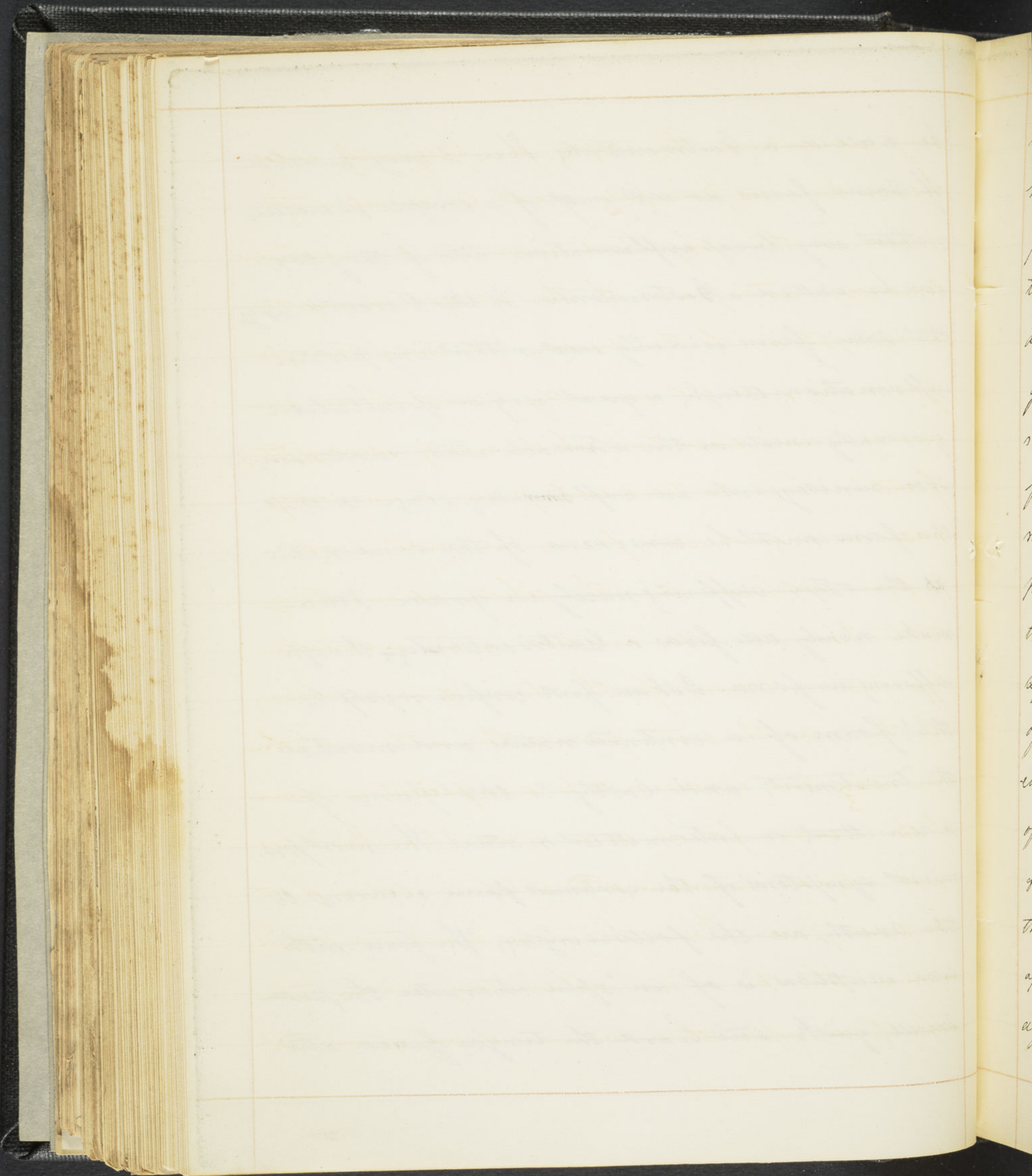


is originally local; and though in its progress, it may be extended over the whole body, we are still to regard it chiefly as symptomatick of the stimulus applied to a particular part. If a sword penetrate the abdomen, and transfix the stomach, the range of sympathy proposed by this viscus will draw on a train of severe consequences, such as pain, inflammation, fever, convulsions, gangrene &c. In this case, the fever and convulsions, are equally symptomatick of the wound; and, by attending principally to these, and overlooking the injury, we should act as in common pestilential diseases, where the force and rapidity of the action of the bloodvessels are deemed of more importance than the local poison which inflames, corrodes, and paralyzes a vital organ.

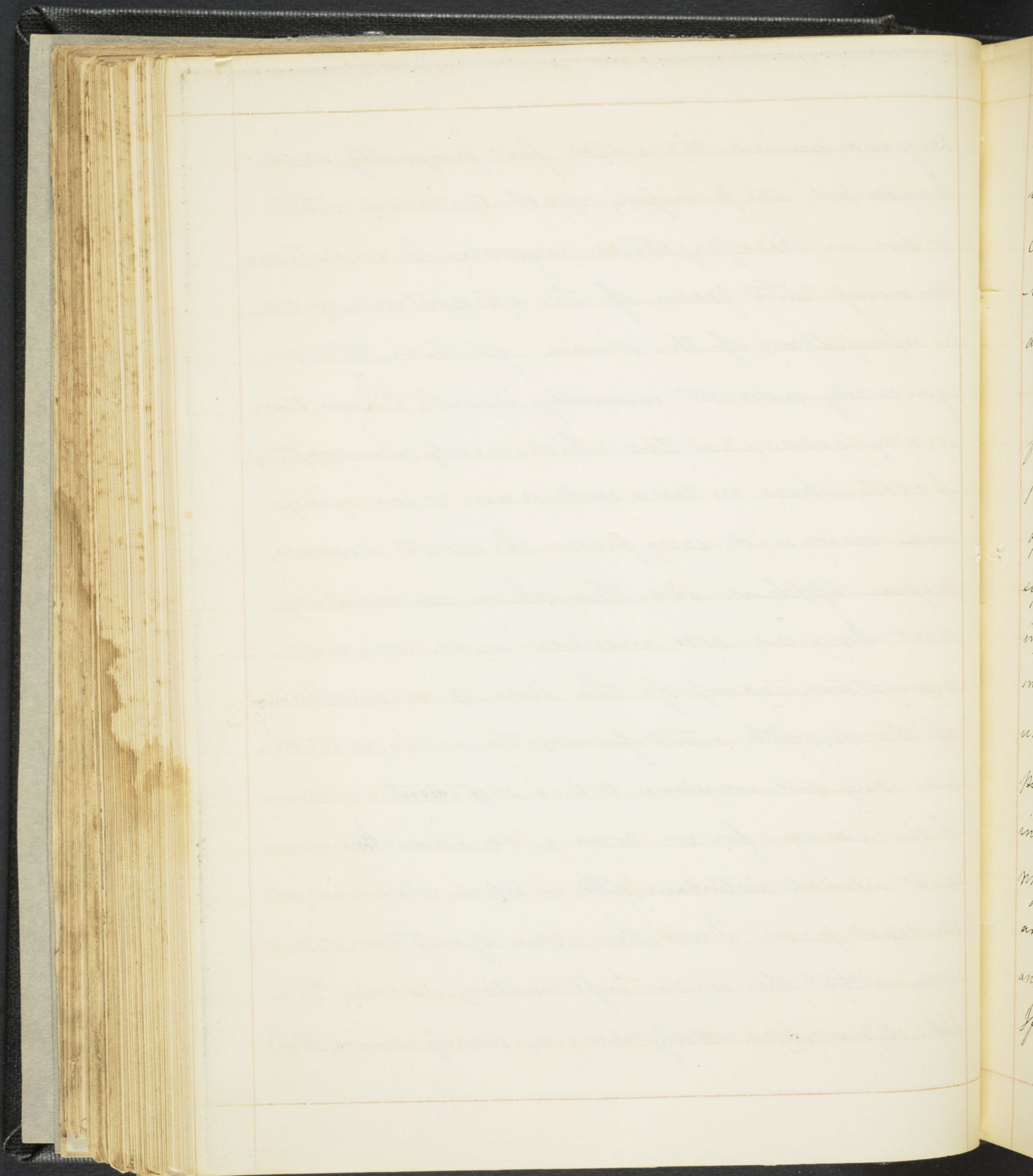
Then every fever of an Idiosyncratic kind, or having its primary local seat in the stomach ^{pancreas,} may



be called a Gastroenteritis. Here I may be asked if some fevers do not exist of a simple character, without any local inflammation, and if they too, can be called a Gastroenteritis. To this I would reply that some fevers evidently exist without any positive inflammation, though, a great degree of irritation generally exists in the stomach and duodenum, soon running into an inflammatory stage, so that this form might be considered of the same nature as the other, differing merely in grade. I then make nearly all fevers a Gastroenteritis; though differing in form. I shall first confine myself to that form of a continued nature, and mention the treatment; and lastly, to that form of a remittent, or intermitted nature. The most prominent symptoms of the continued form, occurring to the south, are the following. (vii) The fever with some exceptions, is of an open character, the pulse small, quick and hard, the tongue furred and

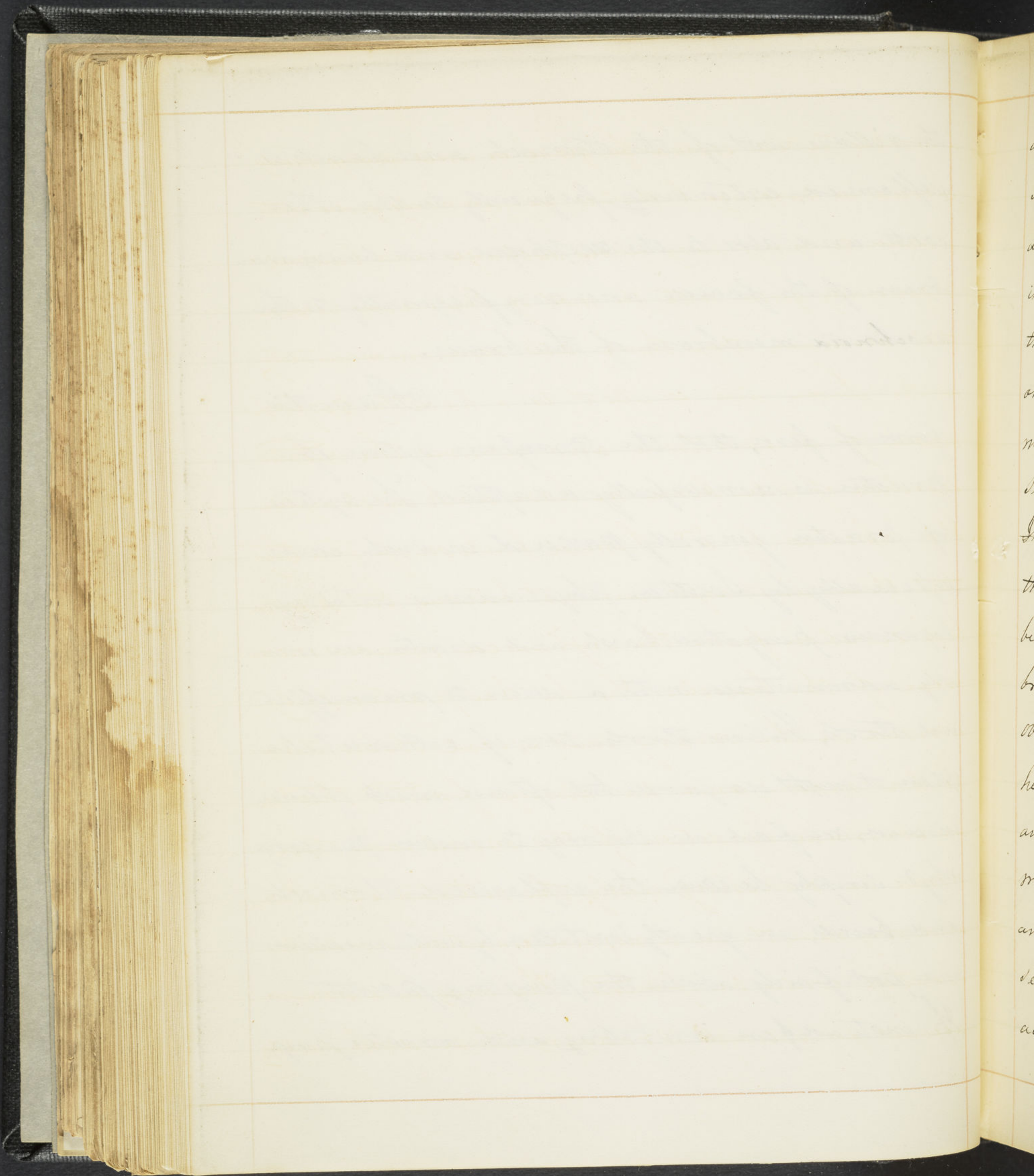


very red around the edges, feet frequently cold,
 head hot and painful, great tenderness and
 pain in the epigastric region. I mention
 tenderness and pain of the epigastric region
 as symptoms of the disease; yet, these though
 generally, were not invariably present. I have seen
 many cases - cases too which nearly always proved
 fatal, where no tenderness, pain or uneasiness
 was discovered, even from the most severe
 pressure applied over the whole alimentary
 tract. I would also mention as an invariable
 symptom, redness of the lining membrane
 of the mouth and fauces, this in the most obs-
 cure cases - was conceived to be a sufficient evidence
 of the disease, for in some cases I have known, no
 great arterial disturbance, and as before observed, not
 the least pain. From the above symptoms it will
 appear that this is an inflammatory disease, and
 dissections repeatedly made, clearly evince, that



the villous coat of the stomach and bowels, is inflamed, extending frequently to the other coats, and also to the oesophagus and lining membrane of the fauces; and very frequently, to the arachnoid membrane of the brain.

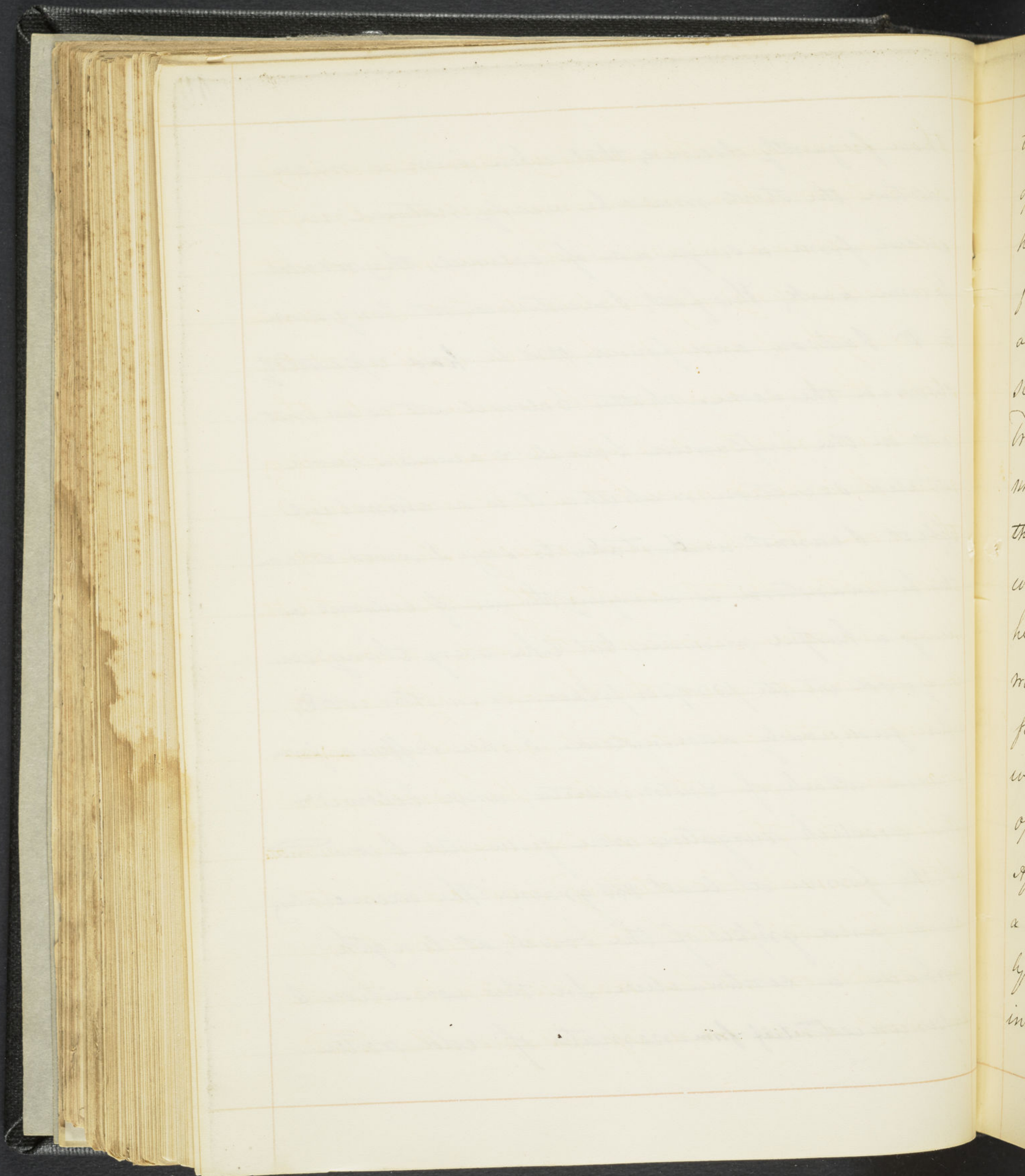
It is in this form of fever, that the Branspain system of practice is wonderfully adapted. The system of practice generally pursued in such cases, especially by Southern physicians, is certainly injurious. Purgatives, harsh and drastic, are commonly administered with a desire to procure effectual stools, bilious stools. Now, if catharsis take place it might do good; but oftener, much oftener indeed, we fail in this way to induce purging. Why? simply because the inflamed stomach and bowels, are greatly irritated by such medicines and put fairly above the purging point. If instead of an irritating and drastic purgative



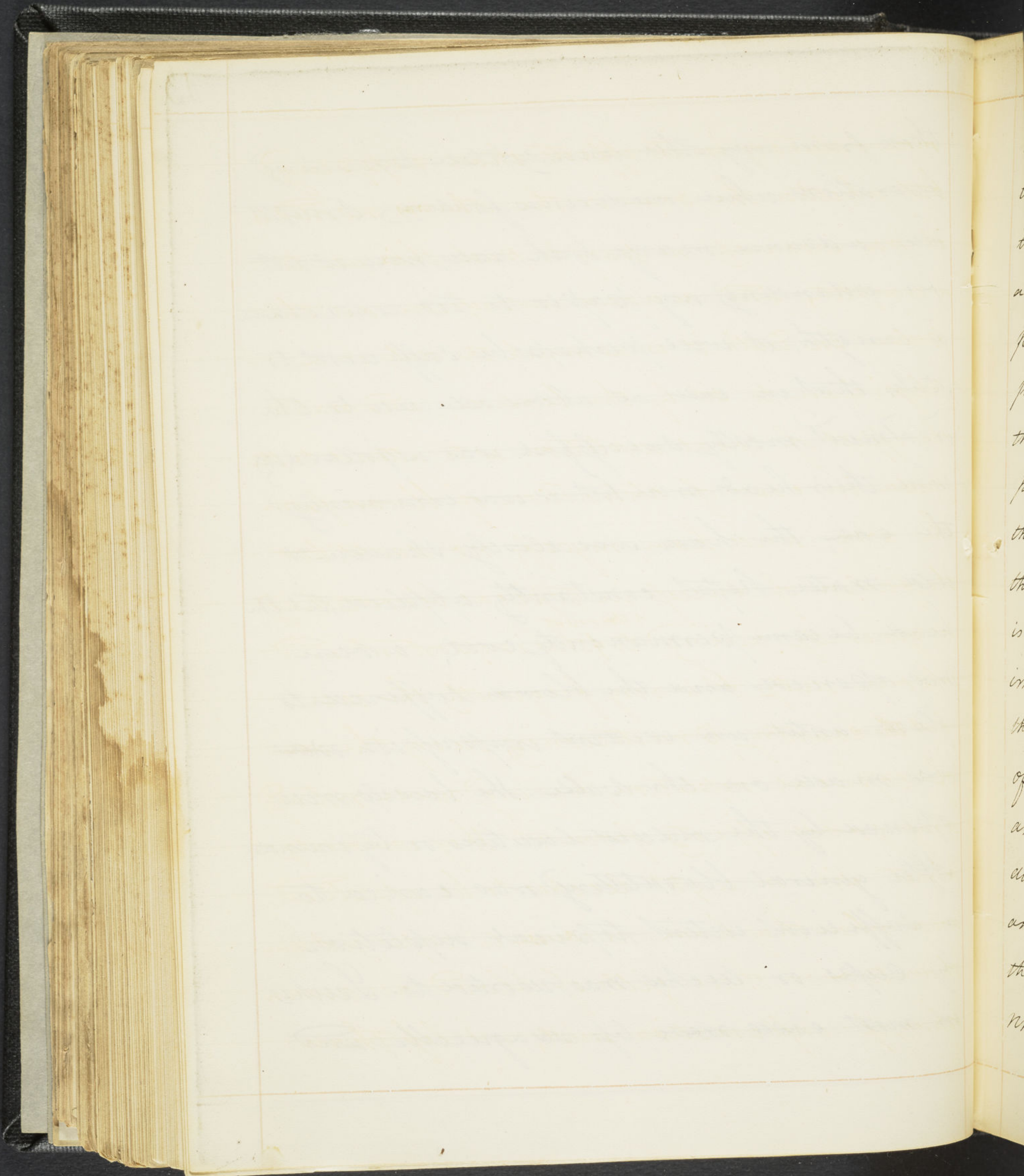
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a simple Tepid enema be given we would always nearly
succeed in purging. Cathartics are commonly given with
a design to bring away bilious discharges, and Calomel
is generally given with the most of Physicians, because
that medicine, they think, acts more immediately
on the Liver, and excites it to a healthy perfor-
mance of its functions, and removes the vitiated
secretion of bile. Hence we have black discharges.
It is asserted by Dr. Samuel Jackson of this City
that these discharges are not bilious; but a mor-
bid secretion from the inflamed mucous mem-
brane of the bowels. This he has particularly
observed in the many autopsical observations
he has made; and has always found that in
an abnormal condition of this membrane, there
would be adhering closely, this vitiated secretion
and very near it, in a normal condition, no such
secretion could be found. This may in a measure
account for Calomel, producing these dark discharges.



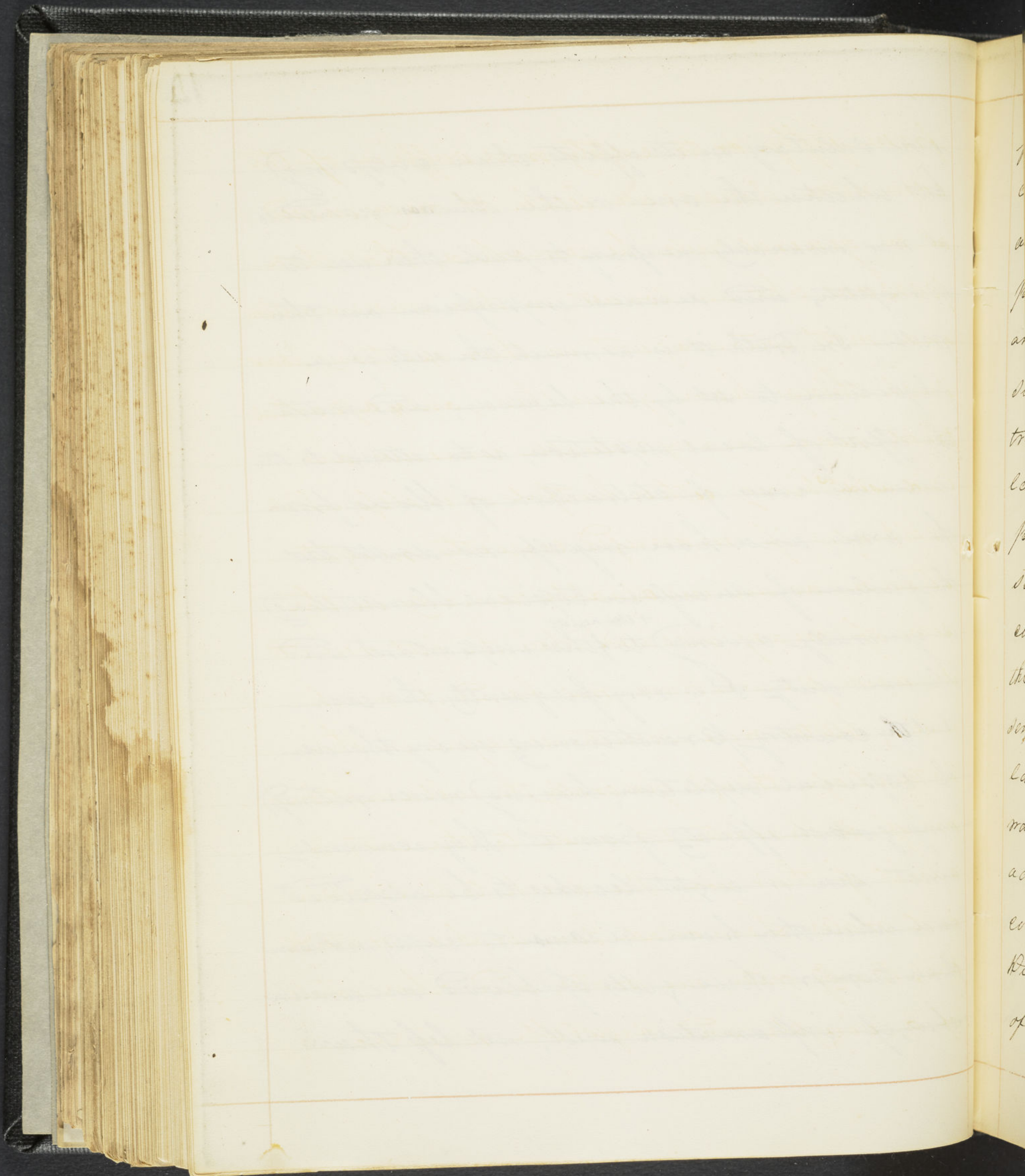
11.
I have frequently observed, that, when from a milder
case the stools would be nearly natural in
colour, from a single dose of calomel, they would
become dark. This fact, I mentioned not long since
to Dr. Jackson, and found, that he had repeatedly
observed the same. Whether calomel acts as an irrit-
ant in the inflamed bowels, & causes a more
vitiated secretion, or whether it is a chemical
effect. I cannot undertake to say. I would not from
this be understood as denying the use of calomel - as
always a hurtful medicine; but like every thing else
is good in its proper place - or in other words,
when judiciously administered. I once suffered from
a severe attack of Gastro-enteritis, and calomel &
other drastic purgatives were given - till I consumed
of the former at least 350 grains. The excruciating
pains and gripes of the bowels, at length
forbade a continuation. In this condition I
experienced ^{more} relief from enemata of cold water



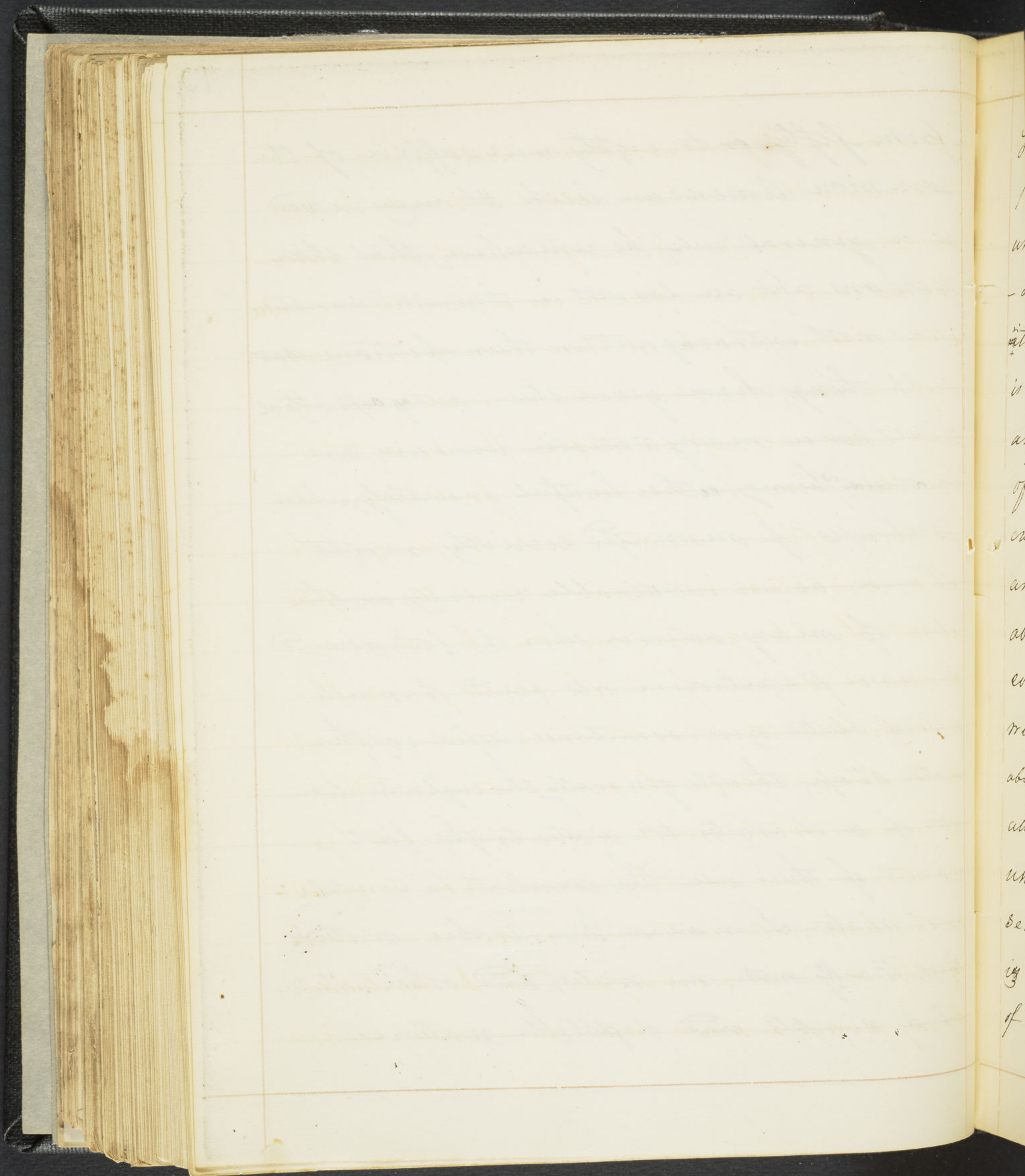
than from any other remedy, these procuring
 operations when medicines failed. I might
 here advance many such cases, were it not
 for extending my paper to too considerable
 a length; it will perhaps be sufficient to
 state, that in cases as above alluded to - the
 treatment mostly successful was as following;
 where their heads were hot as was commonly
 the case, the hair was closely shaven &
 wet water kept constantly applied, till the
 head became permanently cool; a vein
 was opened and the blood suffered to
 flow until an evident impression ~~was~~
 was made on the pulse. The bowels were
 opened by the mildest laxatives or by enemata.
 After general bloodletting was carried to
 a sufficient extent, topical depletion
 by cups or leeches was resorted to. Leeches
 in most cases were less disagreeable, and



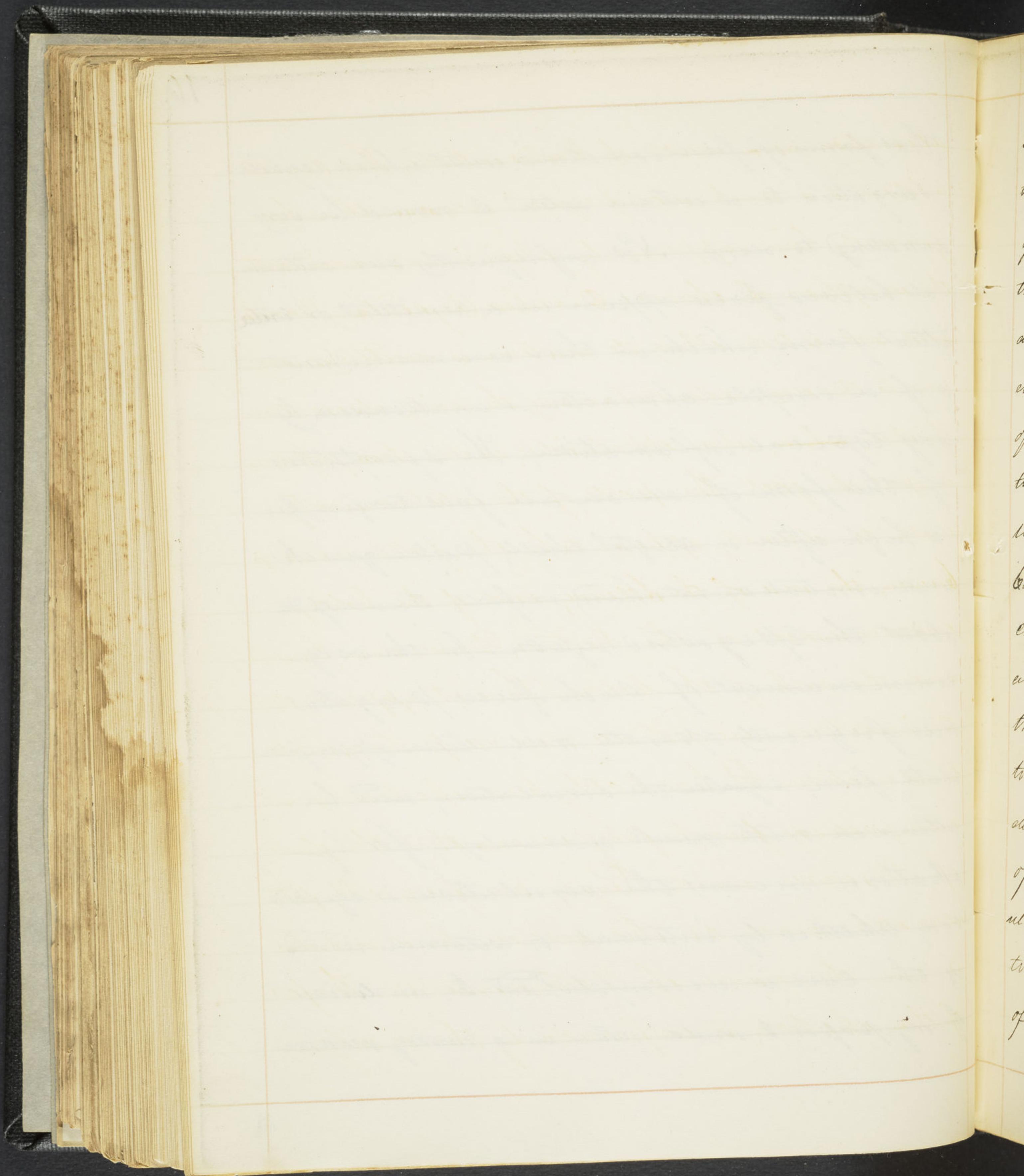
more salutary in its effects, than cupping
 but whether the one or the other was resorted to
 it was invariably necessary to push their use to
 a complete and decided impression on the
 pulse. In truth it is as much the duty of a
 physician to sit by the bedside, and watch
 the effect of local depletion, as to attend to the
 pulse in cases of abstraction of blood from
 the arm; and have myself, no doubt, but
 the failure of success in topical bloodletting
 is generally owing ^{to this neglect} to this important and
 irksome duty. It is very frequently the case
 that the country practitioners, seeing the use
 of topical depletion, having never witnessed
 any good effects from it. They commonly
 direct six or eight leeches to be applied
 and when they have recourse to cups, not more
 than two or three gills of blood are drawn
 when, if inflammation exist, not less than



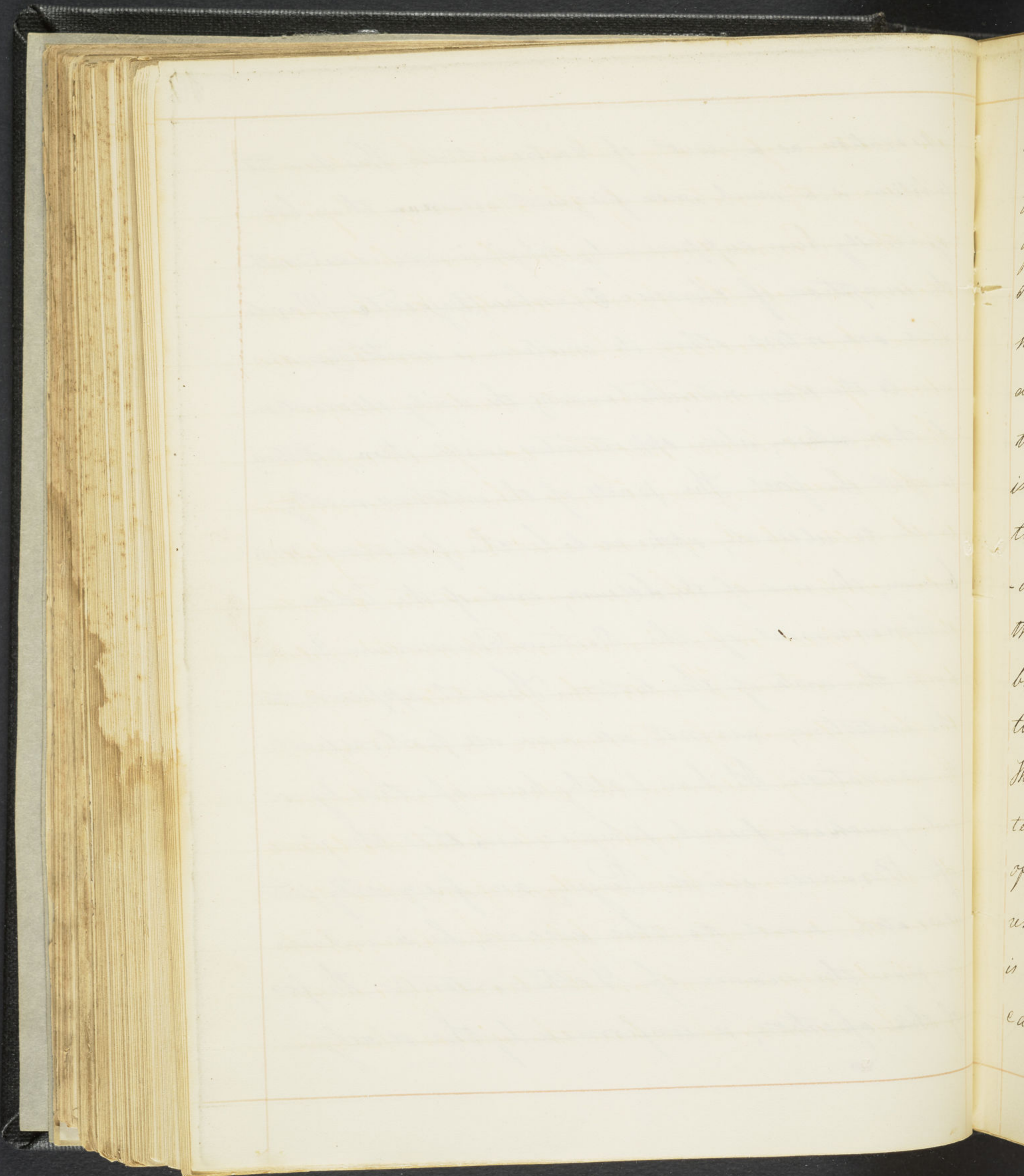
from fifty ~~or~~ to eighty will suffice, of the common American leech. It may indeed as a general rule, be remarked, that those persons who are loudest in their condemnation and most extravagant in their assertions, about such things, have given them only a partial trial, hence many valuable remedies, are laid aside ^{being} either hurtful or useless, which perhaps if managed correctly, might stand as an invaluable remedy, in the cure of many diseases. When the feet were cold the warm pediluvium was found of much service, blisters were sometimes useful in the latter stage, though generally the inflammation was of a character too acute to the last, to admit of their use. The drink to be simple cool water, Lemonade Gum Arabic water &c. Diet, Barley water, rice water, and other articles of a simple and digestible nature.



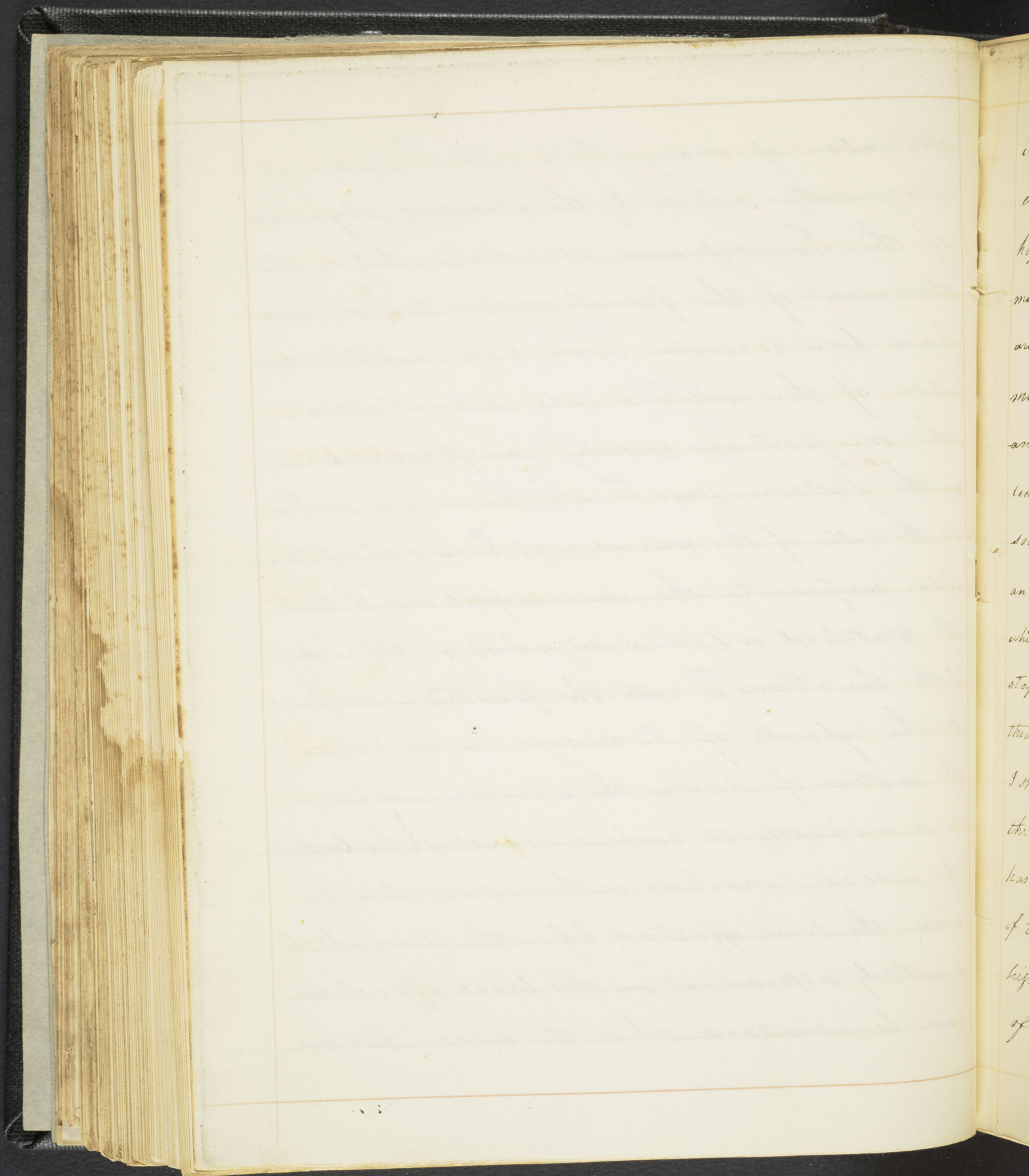
That forms of fever sometimes exist, which require
 purgatives to a certain extent I would be very
 unwilling to deny. Not unfrequently our autumn-
 -al bilious fevers appear in a remittent or inter-
 mittent form, which in their commencement
 is of a simple character or unattended by
 any topical inflammation. The symptoms
 of this form of disease are, foul tongue, fe-
 ver high after a slight chill, pulse quick
 and irritated, not hard, or full, tenderness &c
 about the Epigastric region. In the very
 commencement of such fevers, purgatives
 will frequently operate well, relieve oppression
 abate fever, equalize the circulation, and be
 attended with much advantage; for by
 whatever means the circulation is equalized,
 whether by internal or external remedies
 the cure is accomplished. In conclusion
 of my paper, I would note in a cursory manner



ulceration as a result of Gastro-enteritis. This I am led
 to believe is a much more frequent occurrence, than has
 generally been supposed by physicians; indeed with
 the exception of chronic Diarrhoea, Dysentery, Varicella
 and one or two others, its existence is doubted by many
 even to this day; notwithstanding, the daily observation
 of them, ~~when~~ upon opportunities, enable them positively
 to assert the fact. The parts of the intestines, mostly
 liable to ulcerate, appear to be the following; viz;
 Cecum, the end of the Sæcum, end of the colon,
 commencement of the Rectum, Duodenum, Jejunum
 and the arch of the colon. Thus it appears, that
 the intestines, are not all, or in all portions, liable
 to ulceration. It has lately been asserted by a
 distinguished french physician that the glands
 of Brunner and Peyer, are frequently found
 ulcerated, and to this disease, he is inclined
 to give the name of Gastro-enteritis. The fact
 of this assertion, is confirmed by the daily



observation of many others, and had been
 frequently noticed by the attending physicians
 of the Pennsylvania Almshouse, before the
 statement of the French writer, Bretonneau
 had been received. Some have divided ulcer-
 ation of the intestines into distinct classes—
 the one perhaps mostly comprehensive
 is the following. (1843) 1st into the villous, confined
 to the villi of the mucous coat, 2nd into the follic-
 ular confined to the mucous follicles—3rd Into
 the patched or laminated, which might include
 both the others. 4th into the pustular, confined
 to the glands of Brunner and Peyer.
 The existence of ulcers in the stomach and bowels
 tend evidently to confirm the belief the locality
 of disease, and how vastly necessary it is to
 remove the local affection, before the fever, which
 is entirely dependant on this local affection
 can be removed. when the disease has run



18.
into the ulcerative stage it has been doubted by some whether it
could be relieved, or permanently cured by our remedies; yet we
hope, that with a proper management, with ^{the} mildest and
most soothing remedies, it may be relieved; but at the same time
are inclined to believe, that it leaves the bowels in a situation
more susceptible of disease. It will be perceived that my re-
marks have been altogether dissenting, stating rather what I have
learned from experience than what I have gathered from other
sources. I would not be understood, by any means, to have detracted
an iota from the value of purgatives, in ~~the~~ ^{the} ~~stronger~~ ^{stronger} diseases to
which they ^{are} applicable, but believing as I do, that there is a
stage in which they are inapplicable, and hurtful, I have
thought myself justifiable in affirming it; at the same time
I should do injustice to my feelings, were I not to admit, that
the source from which I derived my first impressions
has served greatly to strengthen my predilection in favor
of the doctrine, inasmuch as it was taught by physicians
highly eminent, both as teachers and practitioners
of medicine.

